

**STATEMENT OF BASIS**  
**TOWN OF PE ELL**  
**NPDES PERMIT NO. WA0020192**

The purpose of this Statement of Basis is to explain the need to modify the Permit to correct a calculation error for the effluent loading for five-day Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS).

**I. GENERAL INFORMATION**

- A. Permittee: Town of Pe Ell  
P.O. Box 215  
Pe Ell, Washington 98572
- B. Discharge Locations: Chehalis River Mile 105.5  
Latitude: 46° 34' 48" N  
Longitude: 123° 17' 56" W

**II. REQUEST FOR MODIFICATION:**

A mathematical error was made in calculating the loading limits for BOD and TSS that requires correction. The current permit includes effluent loading limits for BOD and TSS of 23.4 lbs/day monthly average and 35.1 lbs/day weekly average. Calculation of these limits (on page 6 of the Fact Sheet) were inaccurate. The calculation of the loading limit based flow should have been  $0.78 \text{ MGD} \times 30 \text{ mg/l} \times 8.34 \text{ conversion factor} = 195 \text{ lbs/day}$  (not 23.4 lbs/day). When calculated correctly, this number is higher than 15 percent of the design capacity and therefore is not controlling. The proper monthly and weekly loading limit calculations are therefore:  $255 \text{ lbs/day design capacity} \times 0.15 = 38.2 \text{ lbs/day monthly average}$  and  $1.5 \times 38.2 \text{ lbs/day} = 57.4 \text{ lbs/day weekly average}$ . However, under the Chehalis River TMDL, Pe Ell's BOD is limited to a load allocation of 48.5 lbs/day during the critical season (May through October). So the weekly limit must be lowered to 48.5 lbs/day from May through October.

Permit Section S1.A will be modified from:

	<b>EFFLUENT LIMITATIONS<sup>a</sup>: OUTFALL # 001</b>	
<b>Parameter</b>	<b>Average Monthly</b>	<b>Average Weekly</b>
Biochemical Oxygen Demand <sup>b</sup> (5 day)	30 mg/L, 23.4 lbs/day 85% Removal	45 mg/L, 35.1 lbs/day
Total Suspended Solids <sup>b</sup>	30 mg/L, 23.4 lbs/day 85% Removal	45 mg/L, 35.1 lbs/day

to the following:

	<b>EFFLUENT LIMITATIONS<sup>a</sup>: OUTFALL # 001</b>	
<b>Parameter</b>	<b>Average Monthly</b>	<b>Average Weekly</b>
Biochemical Oxygen Demand <sup>b</sup> (5 day)	30 mg/L, 38.2 lbs/day 85% Removal	45 mg/L, 57.4 lbs/day (November 1-April 30) 45 mg/L, 48.5 lbs/day (May 1-October 31)
Total Suspended Solids <sup>b</sup>	30 mg/L, 38.2 lbs/day 85% Removal	45 mg/L, 57.4 lbs/day (November 1-April 30) 45 mg/L, 48.5 lbs/day (May 1-October 31)

This Statement of Basis will serve as an amendment to the Fact Sheet and Permit.